REMARKS

Claims 10 through 18 and 20 were presented for examination in the present application and remain pending for consideration upon entry of the instant amendment.

The Office Action asserts that a supplemental Information Disclosure Statement ("IDS") in place of the noncompliant IDS submitted July 14, 2006 has not been received. Applicants submit herewith a supplemental IDS in compliance with the provisions of 37 C.F.R. 1.97, 1.98, and M.P.E.P. 609.

Claims 10, 12, 13, 15, 17, 18, and 20 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 3,903,025 ("Farrington") in view of U.S. Patent No. 5,262,043 ("Boenigk"). Claims 11 and 14 were rejected under 35 U.S.C. 103(a) as being unpatentable over Farrington in view of Boenigk and further in view of U.S. Patent No. 3,285,760 ("Hildinger"). Claim 16 was rejected under 35 U.S.C. 103(a) as being unpatentable over Farrington in view of Boenigk and further in view of GB 690,859 ("Crawley").

Claim 10 recites "using organic binder agents consisting essentially of a powdery, graphitable coal-tar pitch with a benzo[a]pyrene content less than 500 mg/kg and a coking value of at least about 80% by weight according to DIN 51905 and a graphitable binder agent that is liquid at room temperature with a coking value of at least about 15% by weight and a benzo[a]pyrene content less than 500 ppm according to DIN 51905, wherein said liquid graphitable binder agent consists essentially of a concentration of said powdery, graphitable

coal-tar pitch in an amount of 10 to 65% by weight in a high boiling aromatic oil (emphasis added)".

The Office Action acknowledges that "3,903,025 does not teach the use or process of producing a coal tar pitch with the properties outlined by the instant claims". See, pg. 3. However, the Office Action asserts that "5,262,043 teaches the process of producing an organic binder and simple refractories, making use of this organic binder". See also, pg. 3.

The Office Action asserts that the coal tar pitch of example 1 of Boenigk when dissolved in aqnthracene oil as shown in example 4 of Boenigk represents-at some point-the binder combination of claim 10 of the present invention. Specifically, the Office Action asserts that "the organic binder of 5,262,043 is made up of coal tar pitch and anthracene oil, where coal tar pitch would have to be added and mixed at a finite rate. Therefore, the coal tar pitch and anthracene oil mixture must inherently still be liquid at some point and have a coking value of at least 15% (emphasis added)". See, pg. 3.

Applicants respectfully disagree. Boenigk does not disclose or suggest either the liquid graphitable binding agent nor the mixing of the same with the powdery graphitable binding agent.

First of all, anthracene oil is not a liquid graphitable binder agent. The pure anthracene oil used in example 4 of Boenigk does not include any graphitizable coal tar pitch. Anthracene oil is a coal tar destillation cut with a coking value of 2%. It dissolves coal tar pitch at elevated

temperatures. Further, the dissolution speed of coal tar pitch is very slow at room temperature.

Second, example 4 of Boenigk only discloses the preparation of a binder agent by mixing the powdery graphitable component with anthracene oil at a temperature of 200 degrees Celsius. At this temperature, the mixture is liquid. After cooling to room temperature, the mixture is solid. The table of example 4 of Boenigk discloses a EPM value of 111.5 degrees Celsius. "EPM" is the German abbreviation for the softening point. During the translation of the German original language text, "EPM" was replaced by "SP" for the softening point. If the softening point of the binder of example 4 is 111.5 degrees Celsius, it will be solid at room temperature. This, of course, is in contrast to the "graphitable binder agent that is liquid at room temperature" recited by claim 10.

In addition, Hildinger does not disclose or suggest the liquid graphitable binder of claim 10 which is also not disclosed in Boenigk. Hildinger is representative of the hot moulding process. Thus, a combination of Boenigk and Hildinger does not result in the teaching of claim 10 because the combined teachings do not show the liquid graphitable binder and the possibility of cold moulding.

None of the cited art, either alone or in combination, discloses or suggests either the "graphitable binder agent that is liquid at room temperature" or the "mixing at room temperature said organic binder agents and refractory granulations to form a mixture" recited by claim 10.

Even if one were to assume that the cited art discloses the graphitable binder agent and the mixing at room temperature step recited by claim 10, which it does not, one of ordinary skill in the art would not combine the prior art as asserted in the Office Action.

First, Boenigk is directed to the preparation of one binding agent. Boenigk discloses a process in which binder agents and refractory particles are mixed and moulded. The binder agent of Boenigk is a mixture of dissolved coal tar pitch and anthracene oil. This mixture is produced under the action of heat, a so-called hot mixing and moulding. The binder of Farrington, on the other hand, has a totally different composition as compared to the one of example 4 of Boenigk because of the presence of components (b) and (c). The refractory forming process with the binder of Farrington is a cold moulding process.

Accordingly, a combination of the teachings of Boenigk and Farrington would not make sense. Advantageously, Farrington makes use of a cold moulding process. Boenigk, on the other hand, in example 4, discloses the hot moulding process. Both technologies have different objectives. The cold mixing and moulding process achieves an objective of saving the amount of energy utilized. The hot moulding process is advantageous in producing a full graphitable composition. It is respectfully submitted that one practicing the invention of Farrington would simply have no reason to look to Boenigk, or vice versa.

Moreover, Applicants submit that the parallel German and European cognates of the present application were published

eighteen months after the priority date of the "US" Boenigk, thus, October 1992. Farrington was published September 1972. Consequently, twelve years were required to realize which potential lies in the earlier invention of Boenigk and to find the process of the invention. This speaks against the motivation of the skilled person to combine the teachings of Farrington as asserted.

Hildinger does not disclose the selected coal tar pitch of Boenigk. Moreover, Hildinger does not disclose the liquid graphitable binder of claim 10. Hildinger, like Boenigk, discloses the hot moulding process. Thus, a combination of Hildinger and Boenigk does not disclose or suggest the elements of claim 10 since the references do not disclose either the liquid graphitable binder or the possibility of cold moulding.

In addition, Hildinger discloses Dolomite refractory particles. These particles are not suitable for use in the process of Farrington which includes an aqueous solution. One of ordinary skill in the art would not combine these references as asserted in the Office Action.

As such, Applicants submit that the cited art fails to disclose or suggest the elements of claim 10. Claim 10 is in condition for allowance. Claims 11 through 18 and 20 depend from independent claim 10 and are in condition for allowance for at least the reasons stated above with regards to claim 10. Reconsideration and withdrawal of the rejections to claims 10 through 18 and 20 are respectfully requested.

In view of the above, it is respectfully submitted that the

present application is in condition for allowance. Such action is solicited.

If for any reason the Examiner feels that consultation with Applicants' attorney would be helpful in the advancement of the prosecution, the Examiner is invited to call the telephone number below.

Respectfully submitted,

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